International Truck and Engine Corporation

Our in the Waste minimization Initiative

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International Truck and Engine Corporation — Springfield Operations

Leading manufacturer of medium-duty, diesel trucks and school bus chassis

International's Motivation to Partner with EPA

- International's Environmental Policy
- Vision
- Operational Benefits





The Policy includes:

- Design, construct and operate our facilities in a manner that protects our employees, individuals in the neighboring communities and the environment
- ...ensure compliance and continual improvement...
- Exercise innovation in optimizing product life-cycle design in our manufacturing processes and our end products to maximize recycling and minimize or prevent the generation of waste and the discharge of contaminants into the environment
- Work with all levels of government toward the development and implementation of equitable and effective environmental laws, rules, regulations and policies



Vision

- Environmental, health and safety issues have tremendous impact on our ability to fulfill our vision to be the **best truck and engine company**. They affect the well being of our employees, our customers and our communities, and they greatly influence our operations and financial performance.
- It is with this knowledge in mind that we have set a vision to become the acknowledged leader in our industry in environmental, health and safety performance.



Operational Benefits

- Each manufacturing location has an environmental management system that supports the corporate policy
 - P2 goals
 - Harder as time has passed
 - Looking for new ideas
 - Build sense of pride in the workplace
 - Success breeds success



Operational Benefits

- Build and maintain an image
 - Reputations are built slowly and destroyed quickly
 - In the 80's our track record was not enviable
 - In the 90's we received multiple awards at several locations – still facility focus
 - Now product issues are dominating the scene and it takes great facilities to build great products – image to customer and regulators
 - ISO 9000, ISO 14000
 - Engine regulations



Operational Benefits

- EPA as an Ally
 - Easier to pick up the phone and ask questions
 - EPA knows us better, if problem arises due to an operational problem then we start dialogue from a better position
 - If EPA sees something they think will benefit me, they have a name and a number



What Waste Minimization Partnership Offered to Us

- Opportunities to interact with EPA HQ and Region to develop relationship
- Recognition through EPA's publications
- Learn from others

What I Wanted to Accomplish Internally with Waste Minimization Partnership

- Revitalize the P2 program
- Generate real dollar savings to the bottom line through new P2 successes
- Create a new awareness of the value of EHS organization from compliance to maintaining to enhancing (danger is in the middle)



- EPA Recognition
 - Launch of Waste Minimization Partnership
 - At Waste Wise Awards in 2002
 - Publications and web page
- Internal Recognition within Corporation
- Greater Interest in P2 Starting to Build Again



International's P2 Responses

- Compliance
- Operate below regulatory thresholds
- Pollution prevention is rewarding
- Stewardship



- Early P2 projects were driven by desire to reduce exposure to TRI reporting. This drove the colored paint reductions.
- The ecoat project was driven by a desire to reduce NPDES violations and reduce hazardous waste generation
- Solder repair driven by desire to not generate HW or report TRI.
- Cab repair was driven by desire to reduce employee exposures



Reductions in Paint Operations

- Thousands of paint colors custom blended to customer specificiation – many with lead
- 20,000 pounds of lead chromate used
- Low occupational exposures and no hazardous waste issues
- TRI reporting drove changes
- Supplier was responsive to needs of plant, no overall cost impact on materials or waste disposal



Reductions in Paint Operations

- Electrodeposition primer (ecoat)
- Up to 70,000 lbs hazardous waste disposed
- Minimal occupational exposures





Reductions in Battery Cable Solder

- Battery cable ends dipped into molten 45% lead solder
- Small amounts of hazardous waste generated
- Replaced with a 95% tin and nonhazardous as a waste





Reductions in Cab Repair

- Repair of dents in cabs required manually pounding out dents and filling in voids with lead solder
- Several repair areas intermixed in production areas
- Slow, dirty and expensive process
- Airborne lead was approaching action levels
- Very little waste generation



Reductions in Cab Repair

- Not just replacement with lead-free solder
- Occupational exposures eliminated
- Investment returned in just two weeks with new process





Reductions in Plastic for Wire Harness Couplers

- Replacement with lead-free plastic
- Lead free alternative was available just for the asking
- Cost neutral
- Approved.
- Implementation awaiting old stock use



Why Voluntary Programs Work for International

- Gives the company something to rally behind
- Friendly inter-plant competition
- Promotes employee good-will
- Community relations
- Cost savings



Conclusion

- International Truck and Engine Corporation—the efforts continue
 - Reduction of other hazardous wastes and toxic materials causing employee exposures
- International is utilizing various tools and management approaches such as ISO 14001 and Six Sigma to identify and solve issues
- International will continue to participate in voluntary partnerships, especially where there are opportunities for improvement that are likely to be less costly than regulation